

What is claimed is:

1. A method for producing a functional film which comprises at least a functional layer comprising a compressed layer of functional fine particles on a support, said method comprising the steps of:

applying a liquid in which the functional fine particles are dispersed onto a transfer support and drying the liquid to form a transfer precursor film having a layer containing the functional fine particles formed on the transfer support;

superposing the support on which the functional layer is to be formed and said transfer precursor film so that the support and said layer containing the functional fine particles are brought into contact with each other, and compressing said layer containing the functional fine particles to form the compressed layer of the functional fine particles on the support; and thereafter

releasing the transfer support from said compressed layer of the functional fine particles.

2. The method for producing a functional film according to claim 1, wherein a surface of the support on which the functional layer is to be formed is softer than a surface of the transfer support on which the layer containing the functional fine particles is to be formed.

3. The method for producing a functional film according to claim 1, wherein said layer containing the functional fine

particles is compressed with a compression force of at least 44 N/mm².

4. The method for producing a functional film according to claim 1, wherein said layer containing the functional fine particles is compressed at such a temperature that said support and said transfer support are not deformed.

5. The method for producing a functional film according to claim 1, wherein said layer containing the functional fine particles is compressed using a roll press machine.

6. The method for producing a functional film according to claim 1, wherein said transfer support has a hard-coating layer on a surface thereof on which the layer containing the functional fine particles is to be formed.

7. The method for producing a functional film according to claim 1, wherein said support is a film made of resin.

8. The method for producing a functional film according to claim 1, wherein said functional fine particles are selected from inorganic fine particles.

9. The method for producing a functional film according to claim 1, wherein the functional layer is selected from the group consisting of a conductive layer, an ultraviolet shielding layer, an infrared shielding layer, a magnetic layer, a ferromagnetic layer, a dielectric layer, a ferroelectric

layer, an electrochromic layer, an electroluminescent layer, an insulating layer, a light-absorbing layer, a light selecting absorbing layer, a reflecting layer, a reflection preventing layer, a catalyst layer and a photocatalyst layer.

10. The method for producing a functional film according to claim 1, wherein conductive fine particles are used as said functional fine particles to form a conductive layer.

11. The method for producing a functional film according to claim 10, wherein inorganic conductive fine particles used as said conductive fine particles are selected from the group consisting of tin oxide, indium oxide, zinc oxide, cadmium oxide, antimony-doped tin oxide (ATO), fluorine-doped tin oxide (FTO), tin-doped indium oxide (ITO) and aluminum-doped zinc oxide (AZO).